

Notice of Allowability

Application No.

09/541,663

Examiner

Brian R. Gordon

Applicant(s)

ADOLFSEN ET AL.

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9-20-04.
2. ☒ The allowed claim(s) is/are 61-69.
3. ☒ The drawings filed on 03 April 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles B. Rodman on December 6, 2004.

The application has been amended as follows:

In the claims:

61. A method for maintaining a uniform and consistent length of a plurality of liquid test packages each comprising a plurality of test package components in a capsule chemistry sample liquid analysis system by ensuring that each test package ~~component~~, which comprises alternating segments of liquid and air, has a predetermined volume, comprising:

(a) selectively aspirating into a first fluid conduit the plurality of test packages components in successive cycles, wherein each test package ~~component~~ is aspirated in a separate cycle that begins with a first air segment having a first air volume, and ends with a final liquid segment and a final air t in that order, and wherein each final air segment has a final air volume;

(b) transferring in sequence the test package ~~component~~ from each cycle from said first fluid conduit to a second fluid conduit;

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(c) controlling or altering the volume of the final air segment of each test package ~~component~~ as it enters the second fluid conduit;

(d) transferring each test package ~~component~~ from said second fluid conduit to a third fluid conduit;

(e) controlling or altering the volume of the first air segment of each test package ~~component~~ as it enters the third fluid conduit.

62. The method of claim 61(e), wherein in step (c) the volume of the final air segment in the second fluid conduit is controlled or altered by detecting an interface between the final liquid segment and an adjacent air segment that is not the final air segment at a reference location along the second fluid conduit corresponding to a predetermined volume equal to the sum of the preferred volume of the final air segment and the final liquid segment.

64. The method of claim 63, wherein the volume of the final air segment in the second fluid conduit is controlled or altered by shearing the final air segment of the test ~~component~~ package at the interface of the first air segment of the adjacent test ~~component~~ package by stopping the aspiration of a test package component currently being aspirated into the first fluid conduit.

Claim 65. The method of claim 61(e), wherein in step (e) the first air segment enters the third fluid conduit adjacent to a first liquid segment, such that the first liquid segment and the first air segment are the next-to-last and last liquid and air segments, respectively, entering the third fluid conduit.

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66. The method of claim 65, wherein the volume of the first air segment in the third fluid conduit is controlled or altered with a valve after detecting an interface between the first air segment and the first liquid segment at a reference location along the third fluid conduit, and stopping the flow of the test package component in the third fluid conduit.

67. The method of claim 66, wherein each test package component in the third fluid conduit flows a predetermined distance, first in the forward direction and then in the reverse direction, in order to detect the interface between the first air segment and the first liquid segment.

68. The method of claim 67, wherein the interface is detected when the test package component flows in the reverse direction.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach nor fairly suggest a method for maintaining a uniform and consistent length of a plurality of liquid test packages each comprising a plurality of test package components in a capsule chemistry sample liquid analysis system by ensuring that each test package, which comprises alternating segments of liquid and air, has a predetermined volume, comprising: (a) selectively aspirating into a first fluid conduit the plurality of test packages in successive cycles, wherein each test package is aspirated in a separate cycle that begins with a first air segment having a first air volume, and ends with a final liquid segment and a final air t in that order, and wherein each final air segment has a final air volume; (b) transferring in sequence the test package from

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each cycle from said first fluid conduit to a second fluid conduit; (c) controlling or altering the volume of the final air segment of each test package as it enters the second fluid conduit; (d) transferring each test package from said second fluid conduit to a third fluid conduit; (e) controlling or altering the volume of the first air segment of each test package as it enters the third fluid conduit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jill Warden
Supervisory Patent Examiner
Technology Center 1700

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